

**Remarks/Arguments:**

Claims 1, 3, 10, 12, 16-19, 21-22, 28-29 and 31-32 stand rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5926468 (Chapman) in view of U.S. Patent No. 7,032,153 (Zhang).

Claims 2, 11, 20, 23, 30 and 33 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Chapman in view of Zhang, and further in view of U.S. Patent No. 6,912,387 (Haas).

Claims 4-9, 13-15 and 27 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Chapman in view of Zhang, and further in view of U.S. Publication No. 2004/0151136 (Gage).

Claims 24-26, 34-36, 39-40 and 43 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Chapman in view of Zhang, and further in view of U.S. Patent No. 5682460 (Hyziak).

Claims 37 and 38 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Chapman in view of Zhang, and further in view of U.S. Patent No. 6771594 (Upadrasta).

Claims 39 and 42 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Chapman in view of Zhang, and further in view of U.S. Patent No. 7,486,634 (Itoh).

Claims 41 and 44 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Chapman in view of Zhang, and further in view of U.S. Published Application No. 2005/0165948 (Hatime).

Applicant respectfully disagrees that the subject claims are unpatentable, for at least the reasons set out below.

### **Missing Limitations**

Applicant notes that in order to support a rejection under 35 U.S.C. 103(a), the Examiner must show that the asserted combination of art teaches or suggests each and every limitation of the rejected claim:

"When determining whether a claim is obvious, an examiner must make "a searching comparison of the claimed invention – *including all its limitations* – with the teaching of the prior art." *In re Ochiai*, 71 F.3d 1565, 1572 (Fed. Cir. 1995) (*emphasis added*). Thus, "obviousness requires a suggestion of all limitations in a claim." *CFMT, Inc. v. Yieldup Intern. Corp.*, 349 F.3d 1333, 1342 (Fed. Cir. 2003) (citing *In re Royka*, 490 F.2d 981, 985 (CCPA 1974))."

*Ex Parte Wada and Murphy*, Appeal No. 2007-3733, Bd. Pat. App. & Inter., January 14, 2008. The Examiner's asserted combination of art fails to satisfy at least one limitation of the claims, and the claim rejections therefore cannot be maintained.

In particular, the asserted combination of Chapman and Zhang fails to satisfy the following limitation of claim 1:

"determining, responsive to said transmitting step failing, a quality of said link at an electronic device by examining quality-of-service (QoS) information available within a second layer of said protocol stack; said second layer being a different layer in said protocol stack than said first layer;"

The Examiner asserted at page 4 of the office action that Chapman discloses the above-recited limitation of claim 1 at column 1, line 65 – column 2, line 33; column 2, lines 38-65; and column 6, lines 40-57. In the Response to Arguments section, the Examiner also cited column 6, line 65 – column 7, line 8 as satisfying the above-recited limitation.

The cited portions of Chapman relate to the transmission of an Information Frame between first and second Data Link Layers at first and second entities. If the Information Frame does not reach the second Data Link Layer, both Data Link Layers are reset. As noted by the Examiner, this is illustrated in Chapman's Figure 5, particularly by blocks 520, 530 and 540.

The Examiner argued that Chapman's determination at block 530 in Figure 5 is equivalent to Applicant's determination of a quality of a link. However, Chapman's determination of whether or not delivery of the Information Frame failed clearly does **not** satisfy the above-recited limitation of claim 1. In particular, claim 1 calls for the determination of link quality to be made "by examining quality-of-service (QoS) information available within a second layer...". Chapman, in making the determination at block 530, does not examine **any** QoS information. As noted by the Examiner, Chapman merely waits until transmission of an Information Frame has been unsuccessful a certain number of times. No examination of **any** link layer is done as part of the determination. In contrast, as recited in claim 1 and shown in Applicant's Figure 4, object 110 examines a layer of protocol stack 100.

In addition, claim 1 calls for the "second layer" in which QoS information is examined to be different from the "first layer" over which the failed packet transmission was made. The Examiner alleged at page 4 of the office action that

column 4, lines 36-40 of Chapman satisfy the transmission of at least one packet via a first layer of a protocol stack. The Examiner further alleged that the frames referred to in that cited passage are inherently transmitted over Chapman's wireless communication medium 240 via a transport layer, which is different from the data link layer. The cited passage of Chapman, however, does not support the Examiner's position. In particular, Applicants refer to column 4, lines 37-41 and 52-54 of Chapman, which recite, respectively, as follows:

"The Data Link Layers 230a, 230b may communicate **frames including Data Link level control information** and/or information corresponding to messages stored at the Store and Forward/Sync Layers 210a, 210b, preferably over a wireless communications medium 240" (*emphasis added*)

"CDPD also defines "**Information Frames**" which include portions of messages and are communicated **at the Data Link level**" (*emphasis added*)

As clearly described by the above passages, the Information Frames which are used to assess and reset the data link layer when necessary are transmitted **over the data link layer itself** (that is, between the Data Link Layer elements 230a and 230b at each entity), and not over any higher layer such as a transport layer. Thus, even if Chapman's determination at block 530 involved examination of information within the data link layer (which, as shown above, it does not), such examination would involve exactly the same layer over which the Information Frame was transmitted.

Chapman therefore fails to satisfy at least the above-recited limitation of claim 1. Because no other teaching of the above-recited limitation was asserted in the office action, the rejection of claim 1 cannot be supported.

Claim 1 is therefore patentable for at least the above reasons. Claims 10 and 16 recite limitations similar to those of claim 1, and are therefore also patentable for at least the above reasons. All remaining claims are dependent upon one of claims 1 and 10, and are therefore also believed to be patentable for at least the above reasons.

Reconsideration and allowance of all pending claims is respectfully requested.


**Conclusion:**

Applicant believes that this application is now in condition for allowance. To the extent that any issues remain to be resolved, however, Applicant requests that the Examiner contact the undersigned to resolve these issues.

The Commissioner is also authorized to charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account No. 50-3750.

Date: September 30, 2010

Respectfully submitted,

  
\_\_\_\_\_  
T. Andrew Currier, Reg. No. 45400

Perry + Currier Inc.  
1300 Yonge Street, Suite 500  
Toronto, Ontario  
CANADA, M4T 1X3  
(416) 920-8170

TAC/KAS/zl